

# Remote Control Door Lock, Theft Deterrent, and Remote Start Transmitter Package Installation

Table 1: [Kit Contents](#)

Table 2: [Replacement Key Description](#)

## [Installation Instructions Part Number](#)

20981984

### Kit Contents

Qty	Description
1	Hood Latch P/N 20941413 (MY10-11 Kit P/N 20981996)
1	Hood Latch P/N 22787039 (MY12 Kit P/N 22924978)
1	Hood Latch P/N 22909711 (MY13 Kit P/N 22957875)
1	Hood Latch P/N 23120089 (MY14 Kit P/N varies with TB4/TB5/X88/Z88 combinations)
2	Flipkey Transmitters with Uncoded Blade (NEW for kits ordered during MY14 and beyond, key P/N varies with TB4/TB5/X88/Z88)
1	Hood Switch Wiring Harness
1	Installation Instructions

**Important:** The remote control transmitter and key shank can now be service separately using a special tool. Review procedure for details.

**Note:** Make sure to verify the current part numbers with the GM Service Parts Catalog.

## [Key Cutting Procedure for Obtaining Replacement Key](#)

**Note:** Before installation of the remote start kit, the dealer must order the remote start key (for keyless kits only).

### Replacement Key Description

MY10 and Beyond Chevrolet Part Number	State of Key	Option Description	MY10 and Beyond GMC Part Number
13504199	Uncoded	BTV & TB5	13504259
13500221	Coded	BTV & TB5	13501514
20873620	Uncoded	BTV & TB4	20873622

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MY10 and Beyond Chevrolet Part Number	State of Key	Option Description	MY10 and Beyond GMC Part Number
20835404	Coded	BTV & TB4	20835400
BTV-Remote Engine Start TB4-Lift Gate TB5-Power Lift Gate			

Note: Make sure to verify the current part numbers with the GM Service Parts Catalog.

Note: This key cutting, key obtaining replacement applies to the United States and Canada only. Export dealers are to contact their local Technical Assistance Center (TAC) for further information.

Due to the uniqueness of the ignition/door lock key, special equipment is required to cut a key.

If you do not have the required equipment, you may order a cut/coded key through GMSPO.

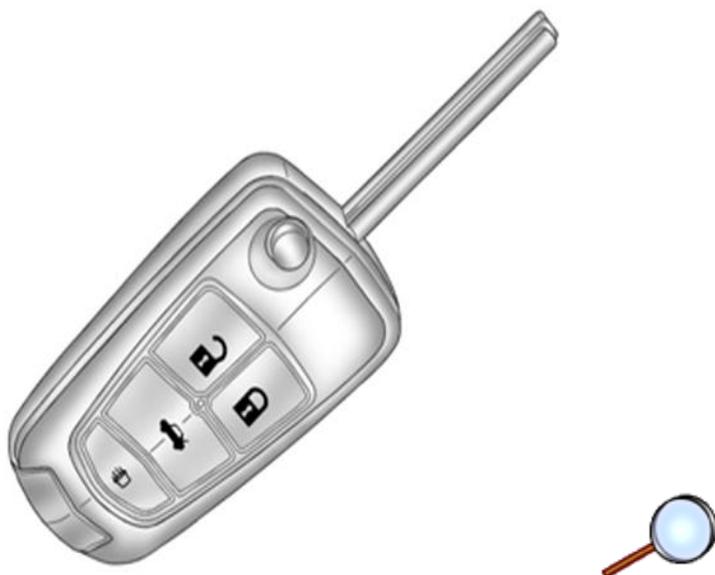
To obtain replacement keys the following procedure is suggested:

1. Obtain the vehicle key code.  
 U.S. Dealers: Access the "Key Code Look Up" application through GM GlobalConnect under the Parts Workbench.  
 Canadian Dealers: Access the "KeyCode Look-Up" feature within the OEConnection D2DLink application.
2. Submit a part order through the GMSPO Parts System for a key blank. Be sure to include the key code in the "note" field of the order.
3. Do not order an uncoded key as you will receive a blank key that will require coding on the special equipment listed below.

**Important:** The order will be shipped the same day if received by 12:00 p.m. (noon) EST, or within 24 hours, Monday through Friday via FedEx (Canadian dealers will be charged for freight for overnight (CSO3) orders).

**Important:** The remote control transmitter and the key shank can now be serviced using BO-51098 Flip Key Blade Fixture.

**Tip:** The new key and transmitter will need to be programmed to the vehicle. Refer to programming procedure at the end of these instructions for details.



### [Parts Information \(For Keyless Kits Only\)](#)

For part numbers and usage, refer to Key in Major Group 2, 2.187 in Part Group Index, of the appropriate parts catalog.

**Important:** As an alternate to Step 2, the following equipment can be purchased through 1-800-GM-TOOLS or by visiting [www.GMDEsolutions.com](http://www.GMDEsolutions.com) (U.S.) or [www.des-canada.ca](http://www.des-canada.ca) (Canada).

General Motors highly recommends the use of the following key machines. General Motors has identified superior equipment through testing and evaluation. General Motors believes these sources and their equipment to be reliable. There may be additional manufacturers of such equipment. General Motors does not endorse, indicate any preference for or assume any responsibility for the equipment from these firms or for any such items which may be available for other sources.

### [Equipment Information](#)

Equipment	Description	Part Number
Computerized Duplicating and Code Cutting	Used to produce a key from a key code or duplicate	Barnes distribution BD Laser Code Cut & Duplicator GMDE Part # 425-9200000
Computerized Duplicating and Code Cutting	Used to produce a key from a key code or duplicate	Kaba Ilco Tricode HS Code Cut & Duplicator GMDE Part # 74-TRI-Code HS
Machine Duplication	Used to produce a duplicate key from an existing key	Kaba Ilco Matrix S Duplicator GMDE Part # 74-Matrix S

Updating the Transmitter to a Coded Key using BO-51098 Flip Key Blade Fixture

**Note:** Updating the transmitter to a coded key applies to the United States and Canada only.

Export dealers are to contact their local Technical Assistance Center (TAC) for further information. Due to the uniqueness of the ignition/door lock key, special equipment is required to cut a key. For equipment details, refer to Service Bulletin #09-00-89-029J: Key Cutting Procedure for Obtaining Replacement Key. If you do not have the

required equipment, use Flip Key Blade Fixture Tool BO-51098 to swap coded key from OE Transmitter and install on Accessory Transmitter. Refer to [Door Lock and Ignition Lock Folding Key Blade Removal and Installation](#).

Tip: The new key and transmitter will need to be programmed to the vehicle. Refer to Programming Vehicle at the end of these instructions for details.

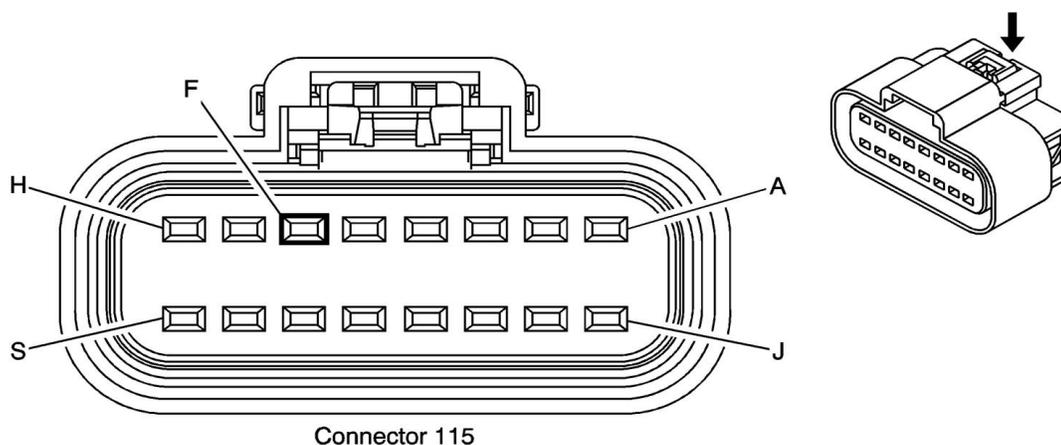
### [Special Tools](#)

- Scan Tool with capability of communicating on GMLAN
- Service Programming System (SPS – TIS2WEB or equivalent)
- J-46079 Tire Pressure Monitor Diagnostic Tool
- BO-51098 Flip Key Blade Fixture

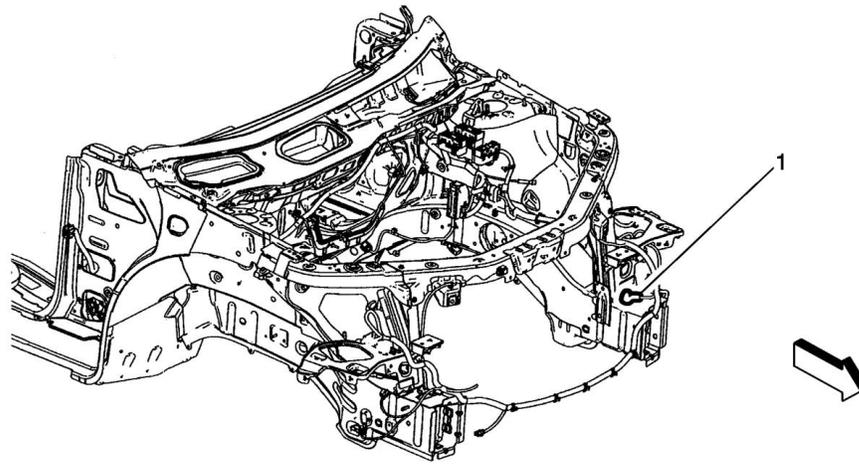
### [Procedure](#)

**Note:** When calling the TCSC, you must use the Authorization Code from the kit.

1. Remove hood latch and install new latch. Refer to [Hood Primary and Secondary Latch Replacement](#).
2. Connect the hood switch wiring harness to the hood switch.
3. Remove the front fascia. Refer to [Front Bumper Fascia Replacement](#).
4. Route the hood switch wiring harness into the engine compartment along the forward lamp harness toward the forward lamp harness to body harness connector X115 behind the underhood electrical center. Secure the hood switch wiring harness to the forward lamp harness with three integral tie wraps.
5. Disconnect the forward lamp harness to body harness connector X115.



6. Insert signal circuit terminal pin from the hood switch wiring harness into connector x115 Cavity F as shown (Latch Signal Circuit Cavity Pin B from 3– way hood latch connector). Visual check that the PINK/BLACK wire is already in cavity F.
7. Snap forward lamp harness to body harness connector X115 together.



8. Route the hood switch wiring harness ground ring terminal to G101 ground location (1).
- Caution:** Refer to [Fastener Caution](#).
9. Remove the G101 ground bolt, add the hood switch wiring harness ground ring terminal under the existing ring terminal, and secure with original bolt and tighten to 9 Y (80 lb in).
10. Adjust the hood latch placement as needed for proper hood alignment.
11. Reinstall all previous parts removed.
12. If key cutting is required, cut the new keys using the existing key, if precut keys have been ordered proceed to Programming Vehicle.

### [Programming Vehicle](#)

#### Service Programming System (SPS)

**Note:** For North America vehicles, the installation of accessory remote start requires BCM programming. This is done with a Service Programming System. The installer needs to call the Techline Customer Support Center (1-800-828-6860). The Techline Customer Support Center will provide programming instructions and changes to the vehicles calibration settings. You must provide the vehicle identification number (VIN) of the vehicle to be programmed and the authorization code provided with the accessory, when calling.

For step-by-step control module programming instructions, please refer to the techline information system (TIS) terminal.

Review the information below to ensure proper programming protocol.

#### **Note:**

- DO NOT program a control module unless you are directed by a service procedure or you are directed by a General Motors service bulletin. Programming a control module at any other time will not permanently correct a customers concern.
- It is essential that the TIS terminal, MDI, and/or Scan Tool, is equipped with the latest software before performing service programming.
- Due to the time requirements of programming a controller, install SPS Programming Support Tool to maintain system voltage. Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. If the above tool is not available, DO NOT connect a battery charger, connect a fully charged 12V jumper or booster pack disconnected from the AC voltage supply.
- Some modules will require additional programming/setup events to be performed before or after programming.

- Some vehicles may require the use of a CANDi or MDI module for programming.
- Review the appropriate service information for these procedures.
- DTCs may set during programming. Clear DTCs after programming is complete.
- Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.

Ensure the following conditions are met before programming a control module:

- Vehicle system voltage:
  - There is not a charging system concern. All charging system concerns must be repaired before programming a control module.
  - Battery voltage is greater than 12 volts but less than 16 volts. The battery must be fully charged before programming the control module.
  - Turn OFF or disable any system that may put a load on the vehicles battery, such as the following components:
    - Interior lights
    - Exterior lights including daytime running lights (DRL)—Applying the parking brake, on most vehicles, disables the DRL system
    - Heating, ventilation, and air conditioning (HVAC) systems
    - Engine cooling fans
    - Radio, etc.
- The ignition switch must be in the proper position. SPS prompts you to turn ON the ignition, with the engine OFF. DO NOT change the position of the ignition switch during the programming procedure, unless instructed to do so.
- Make certain all tool connections are secure, including the following components and circuits:
  - Scan Tool
    - The RS-232 communication cable port
    - The connection at the data link connector (DLC)
    - The voltage supply circuits
  - MDI
    - The USB, Ethernet or Wireless communication port
    - The connection at the data link connector (DLC)
- DO NOT disturb the tool harnesses while programming. If an interruption occurs during the programming procedure, programming failure or control module damage may occur.

In the event of an interrupted or unsuccessful programming event, perform the following steps:

1. DO NOT turn the ignition OFF. Ensure that all control module and DLC connections are secure and the TIS terminal operating software is up to date.
2. Attempt to reprogram the control module.
3. If the control module can still not be programmed, turn the ignition OFF for at least one minute.
4. Turn the ignition ON and attempt to reprogram the control module. The control module should program.
  - ⇒ If the control module still cannot be programmed, replace the control module.

After successfully programming the control module, ensure that all post programming procedures are performed; refer to Body Control Module Programming and Setup for the appropriate control module Programming and Setup document for any required procedures.

### Body Control Module Programming and Setup

The body control module (BCM) must be programmed with the proper calibration software. The BCM stores and utilizes this information however if it is not properly configured with the correct calibration software, the BCM will not control all of the vehicle features properly.

Ensure that the following conditions exist in order to prepare for BCM programming:

1. The battery is fully charged.
2. The MDI data link connectors are secure.
3. The scan tool is loaded with the most current software version.
4. All disconnected modules and devices are reconnected securely.
5. This entire procedure has been reviewed before proceeding.

Do not reprogram the body control module unless directed by a service procedure or a service bulletin.

#### BCM Programming (Key Ignition System)

To program and setup an existing or new replacement BCM, perform the following procedure:

1. With a scan tool, access the Service Programming System (SPS) and follow the on-screen instructions.
2. On the SPS Supported Controllers screen, select BCM Body Control Module - Programming and follow the on-screen instructions.
3. On the SPS Supported Controllers screen, select BCM Body Control Module - Setup and follow the on-screen instructions.  
**Note: When performing the Tire Pressure Monitor Sensor Learn during BCM setup, the Tire Pressure Monitor Diagnostic Tool must be used to activate each tire pressure sensor.**
4. On the SPS Supported Controllers screen, select BCM Body Control Module - Configuration and follow the on-screen instructions (if applicable).
5. On the SPS Supported Controllers screen, select IMMO Immobilizer Learn - Setup and follow the on-screen instructions (only required if programming a replacement BCM).
6. Check the driver information center display for additional messages regarding further calibration instructions. If there are no addition driver information center instructions present, programming is complete.